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Title of Invention: A Process for Preparation of Artificial Joint

Abstract

Problem to be solved: It is desired to provide an artificial cartilage-mediated prosthetic joint which is rich in an elastic deformation, has a good mechanical strength, does not change in quality within a living organism, and does not stimulate body tissues and wherein a high water content gum (gel) with an extremely less friction and wearing under loading is applied closely to fix to a contact face of the joint.

Solution: According to this invention, the prosthetic joint to which the artificial cartilage is applied by applying an aqueous solution of a polyvinyl alcohol in a concentration of 8 wt% to 40 wt%, wherein the polyvinyl alcohol is saponified in 98% and above of a saponification value, and has 1000 and above of an average degree of polymerization, to one side or both sides of contact faces, with a number of holes or bonded nets, of bone head or acetabular comprising artificial materials, and then repeating 2 to 8 times a series of freeze-thawing cycle, such as, cooling to a temperature of -10C and below, solidifying and forming, then thawing is provided.